THE SOCIO - ECONOMIC IMPACT OF ROADS ON RURAL COMMUNITIES: A CASE STUDY ON THE LONGHOUSES COMMUNITIES OF RUMAH UKAN, RUMAH JANDOK AND RUMAH BUNDONG OF ULU BUKIT GURAM - ULU YONG ROAD.

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Master of Environmental Management
(Development Planning)
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The Socio-economic Impact of Roads on Rural Communities: A Case Study on the Longhouses Communities of Rumah Ukan, Rumah Jandok and Rumah Bundong of Ulu Bukit Guram—Ulu Yong Road.

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(UNIMAS)
2005
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Frankie Bendindang Manjah.
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ABBREVIATIONS

The following abbreviations are used in this study

RGC  Rural Growth Centre
RD  Rural Development
NCR  Native Customary Land
TMP  Third Malaysia Plan
IADP  Integrated Agriculture Development Programme
SPSS  Statistical Package for the Social Sciences
ABSTRACT

(Rural development is one of the major agendas of the Third World countries. Many development programmes have been channelled and implemented to improve the livelihood of the rural community. Development of rural roads is to connect the remote rural community to have access to the urban infrastructure such as basic amenities and marketing outlet for their agriculture produce.

The aim of this study is to find out how far the impact of rural roads in transforming their socio-economic activities in their livelihood. Descriptive analysis (frequency distribution) was used to analyse the quantitative components of this study. A paired samples t-test analysis was used to verify if there was any significant difference in their income before and after the roads served their longhouses. The finding shows that there was a significant difference in the level of income before and after the roads are built. Correlation analysis was used to analyse the relationship between the age and their perception towards the impact of roads and education attainment to their perception towards the road in relation to their future livelihood. Both of the analysis results were not significant. Some of the issues discussed were on their participation on Government development programmes that were introduced in relation to easy mobility and transportation.)
**ABSTRAK**

Pembangunan luar Bandar merupakan salah satu agenda utama bagi Negara-negara ketiga. Banyak program pembangunan telah disalurkan dan dilaksanakan untuk meningkatkan kehidupan penduduk luar Bandar. Pembangunan infrastruktur jalanraya di luarBandar merupakan salah satu agenda utama menghubungkan penduduk luar Bandar yang terpencir akses ke infrastruktur Bandar seperti kemudahan asas dan pasaran untuk hasil pertanian.

isu-isu yang dibincangkan adalah penyertaan mereka dalam program pembangunan kerajaan yang telah diperkenalkan berkait dengan kesenangan mobiliti dan pengangkutan.

In most developed countries, rural development remains a high priority because the majority of the population, and of the poor, live in rural areas. Nevertheless, progress in rural development has been hampered by structural and institutional biases against the rural poor. (Jones, 1977, pp. 44-45), echoing the dependency theorists' notion of interdependency relationships, has identified the problem of "urban bias." He argues that there is a systematic tendency for a country's resources to be unfairly and inefficiently distributed in favor of urban areas to the detriment of people living in rural areas. Chamber (1965) exposes the "invisible" side of rural poverty and highlights some of the inequalities within rural areas. Both Chamber (1965) and Johnson and Clark (1962) advocate the use of localized rural development strategies that benefit the majority of the rural poor.

After the Second World War, many of the Third World countries achieved independence from their colonial masters. During the Colonial era, development such as road infrastructure was built in areas that met the economic interests and needs of the colonial countries. Therefore, areas with plantation activities were well connected with roads and efficiently maintained as
CHAPTER 1

Introduction

1.0 Introduction

In most developing countries, rural development remains a high priority because the majority of the population, and of the poor, lives in rural areas. Nevertheless, progress in rural development has been hampered by structural and institutional biases against the rural poor. Lipton (1977, pp 44-45), echoing the dependency theorists' notion of core-periphery relationships, has identified the problem of "urban bias". He argues that there is a systematic tendency for a country's resources to be unfairly and inefficiently distributed in favor of urban areas, to the detriment of people living in rural areas. Chambers (1983) exposes the "invisible" side of rural poverty and highlights some of the inequalities within rural areas. Both Chambers (1983) and Johnston and Clark (1982) advocate the use of broad based rural development strategies that benefit the majority of the rural poor.

After the second World War, most of the Third World countries achieved their independence from their colonial masters. During the Colonial era, development such as road infrastructures were built in areas that serve the economic interests and needs of the colonial countries. Therefore areas with plantation activities were well connected with roads and other communication infrastructure and
those areas without the major economic activities were neglected and were undeveloped. Most of the areas in the rural areas were neglected and inaccessible by any form or mode of transportation. After achieving their independence, the Third World countries struggled to develop and narrow down the poverty lines of regions. Therefore regional planning or developments were done with the intention to balance development between regions. Other main emphasis of the programme then was on the development of new land, with the view to reduce the problems of land hunger, rural unemployment and poverty. To improve the rural communities roads and other infrastructure have to be constructed to connect these inaccessible rural villages. Rural roads represent the link between the urban "core" and the rural "periphery". They have the potential to counter some of the disadvantages of remoteness and provide benefits to all groups within a community. In addition, rural road provision addresses Johnson and Clark's (1982) call for a three-pronged approach to rural development, addressing production, consumption and institutional aspects of development. There exists a vast literature on the impacts of rural roads (Windle 1997). While in the past assessment has concentrated on economic impacts (discussed in relation to Sarawak in Windle and Cramb (1997)), more recent studies have shown that social impacts are equally if not more important.

In Malaysia, the concept of vision 2020, or the goal of becoming a fully developed country by the year 2020, is strongly promoted by the
government. For being a state in the Federation of Malaysia, development in Sarawak is shaped by five-year Malaysia plans. Therefore, development in Sarawak is incorporated into the Malaysian context. An important dimension is to bring balanced development to reduce the disparity in social and economic development across regions and states in Malaysia and to bring the standard of living and quality of life of lesser develop states at par with the richer states. These concepts were formulated in the Malaysian economic regional planning of the First and Second Outline Perspective Plans (OPP1 and OPP2). Under the TMP, one of the agenda to achieve the various goals of regional development is the rural urbanization by providing the urban infrastructure to the rural areas. One of the important infrastructures is providing road access to rural villages.

Building of roads is expected to open new areas for development. In addition, roads will promote further physical or social development to reach the rural communities to uplift their living standard.

Sarawak was administered by the British Colony after the Second World War when the last White Rajah (Vynner Brooke) transfer the power to the British Colony due to lack of fund to administer the state (Sarawak history). Therefore, Sarawak was unlike the West Malaysia, does not have the opportunity to attract big plantation to invest in the states during their era. Instead during their era, small holding of agricultural activities were encouraged. The Chinese immigrants were
encouraged to participate and involved in trading activities. As a result, the Chinese were better off economically than the local natives. The colonial economic approach made Sarawak lack of proper roads infrastructure as it counterpart states in west Malaysia. Therefore, the mode of transportation in Sarawak depends on the riverine and till today most of Sarawak interior villages are still unconnected by roads to the nearest urban areas.

As the majority of the population in Sarawak lives in rural areas, issues of rural development remain of major importance (Cramb and Reece 1988; King 1988; Abdul Majid Mat Salleh et. al. 1990; Cleary and Eaton 1992). However, the rural population is widely scattered throughout the remote areas of the State, which has a population density of only 13 people per area to another square kilometre (Malaysia 1994). To overcome these problems of isolation, one rural development strategy applied in Sarawak has been to concentrate resources in large-scale land development schemes and bring people to these centres. However, these land schemes have encountered many problems (King 1986; Cramb 1992) and in any case can only cater for a fraction of the rural population. An alternative development strategy, which would address the needs of the majority of people living in rural areas, is to provide road access and encourage the rural population to develop in situ. Rural roads are seen as having potential to ease the problem of remoteness and to facilitate rural development.
However, the impacts of rural roads are likely to be complex and to differ from one another.

The focus of this research is to find out the impact of the rural roads on the social economic activities on the rural villages in Sarawak, namely the long houses in the kapit-Bukit Guram and Ulu Sg. Yong Road in kapit Division. The study will explore how far the road has changed their mode of transportation, communication and their livelihood. The building of the roads to the rural areas is to open new lands for further development. Inevitably this infrastructure will transform the rural areas into attractive places to live and work in. Therefore, it will and hopefully to discourage or slow down the rural urban migration and at the same time to stimulate cash agro activities.

1.2 Justification and Need for this research

The proportion of the rural population is expected to decrease in the future. Therefore to slow down the process, rural development is still an important national agenda to ensure that balance urban-rural development is achieved.

After achieving independence, extensive efforts have been carried out by various government agencies to improve the life of the rural population. But nonetheless, the pace of change in the states of Sabah
and Sarawak has been slow compared to the Peninsula Malaysia. The reasons is that probably due to the vastness of its size and the sparse population distribution pattern and the complicated land laws and cultures and norms of the natives which slow down the process of development as desired by the government. Nevertheless, various rural development strategies and infrastructure facilities have been developed and implemented. One of them is the construction of rural roads to connect the rural settlement to service centre. It is hope that the construction of roads will facilitate greater interaction, institutional development and integration with the rest of the country. Therefore, the researcher choose these three (3) remote longhouses to find out how far the rural roads play in improving their socio-economic activities.

The Iban communities at Sungai Yong and Ulu Sungai kapit of Kapit Division is specifically chosen for the study because they are located within convenient distance to the researcher’s home and his familiarity with the communities; a choice that had to be made because the time frame to complete the research is very short (three months).

1.3 Background of the Study Area.

The study area is called Sungai Yong and Ulu Sungai kapit in kapit Division, referring to the two rivers name “Yong” and “Kapit”. These
areas are served by a small town settlement called "Kapit" with the population of less than ten thousand people. It is one of the towns in Kapit Division where the rural communities do their trading of marketing their Agriculture products and buying their basic necessities. Kapit Division is very hilly and most of the interior areas are virgin jungle covered by detrocarp forest where most of Sarawak timbers for export were from. Logging activities is its major job provider for the local communities. There is no major agricultural activity due to its remoteness and hilly terrain. The rural local community who are majority Iban mainly practice the shifting cultivation of hill padi. Cash crops farming are done in small scale by individual family especially those that have easy accessed to the towns and other small commercial establishment to market their agriculture products.

The trans-migration of Iban according to Freeman(1970), the Dayak Iban migrating from Kalimantan, Indonesia and making their settlement in the upper Rejang basin in the early 18th century. They built their settlement along the Rejang River and its tributaries. Sungai Yong and Sungai Kapit are one of the tributaries of Rejang River. In the early days those early settlers settled along Sungai Yong and Sungai Kapit in Kapit Division as farmers and gatherers till today. Only the young and the educated leave for bigger towns looking for better livelihoods. Like other settlement in Sarawak, the Iban communities settled along the major rivers and its tributaries. Rivers
are very important to the communities, not only rivers provide the route for them to move around, but rivers also provide the source of their food like fish and drinking water. Rivers were their link way to new land and hunting ground. They identify themselves by the river name such as ‘kami orang Sungai Yong’ mean ‘we the people of Yong river’. But today, with the rapid increase in population and the pollution of rivers by logging company make livelihood to depend on wild game and shifting cultivation in the rural areas to hardship and uncertainty. Therefore, the need to have access to market economy to improve their livelihood is an urgent matter to be addressed by the government.

There are 15 longhouses in the study area, all are Iban communities, comprising about 245 families with the total population of 1,836 people settling along Sungai Yong and 255 families with a population of 2019 people settling along Kapit Bukit Guram road (Medical Department statistic, 2001). The study area covers the selected longhouses along the Bukit Guram-Ulu Yong kapit road with the distance of seventeen kilometers. The names of the longhouses where the selected respondent were chosen are from Rumah Bundong of Sungai kapit with 41 families of pop. 306 people and Rumah Ukan with 23 families of pop of 152 and Rumah Jandok with 20 families with pop of 253 people. The Ulu Yong road is a feeder road connected to Bukit Guram road which link to Kapit town. The other rural road that connecting the interior of kapit District is the Antaroh to Ulu
Sut Road. Timber Camp road are also widely use by the rural communities for their mobility within the Kapit Division. The Ulu Yong road is a feeder road of Bukit Guram road that stretched for eight kilometres which has been completed three years back. The other nine (9) kilometers of the road is the continuation of the old Yong road that connected the upper longhouse in the upper reaches of Ulu Yong river which was completed a year back. Rumah Bundong was located at the further end of kapit Bukit Guram Road. The construction of this roads enable the interior communities of seven longhouses of 137 families with the population of 1,104 peoples of 2001 census by the medical department is connected to kapit via the Ulu Yong and Bukit Guram road. Before the construction of the road their mode of transportation was by long boat navigating along Yong and Kapit river to reach Kapit town. The lower part of Sungai Yong is not connected with road yet, and there are 6 longhouses along that part of the river.

Table 1.1 List of Long houses and settlements along Bukit Guram-Ulu Yong Road

<table>
<thead>
<tr>
<th>Bill</th>
<th>Name of Long houses</th>
<th>House hold</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rh. Linggie</td>
<td>34</td>
<td>189</td>
</tr>
<tr>
<td>2</td>
<td>Rh. Ukan</td>
<td>23</td>
<td>152</td>
</tr>
<tr>
<td>3</td>
<td>Rh. Manok</td>
<td>29</td>
<td>228</td>
</tr>
<tr>
<td>4</td>
<td>Rh. Empam</td>
<td>18</td>
<td>124</td>
</tr>
<tr>
<td>5</td>
<td>Rh. Lapik</td>
<td>7</td>
<td>68</td>
</tr>
<tr>
<td>6</td>
<td>Rh. Memaloh</td>
<td>5</td>
<td>53</td>
</tr>
<tr>
<td>7</td>
<td>Rh. Semut</td>
<td>8</td>
<td>75</td>
</tr>
<tr>
<td>8</td>
<td>Rh. Jandok</td>
<td>19</td>
<td>253</td>
</tr>
<tr>
<td>9</td>
<td>TOTAL</td>
<td>143</td>
<td>1142</td>
</tr>
</tbody>
</table>
Table 1.2 List of Longhouses and settlements along Kapit Bukit-Guram road.

<table>
<thead>
<tr>
<th>Bill</th>
<th>Name of Longhouses</th>
<th>No. Household</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rh. Dana, Sg. Sesibau</td>
<td>36</td>
<td>201</td>
</tr>
<tr>
<td>2</td>
<td>Rh. Nuang, Sg. Kapit</td>
<td>23</td>
<td>110</td>
</tr>
<tr>
<td>3</td>
<td>Rh. Chambok, Sg. Kapit</td>
<td>22</td>
<td>145</td>
</tr>
<tr>
<td>4</td>
<td>Rh. Unjah, Sg. Sesibau</td>
<td>16</td>
<td>138</td>
</tr>
<tr>
<td>5</td>
<td>Rh. Jinggong, Sg. Sesibau</td>
<td>14</td>
<td>147</td>
</tr>
<tr>
<td>6</td>
<td>Rh. Emkang Sg. Sesibau</td>
<td>14</td>
<td>69</td>
</tr>
<tr>
<td>7</td>
<td>Rh. Unggat, Sg. Kapit</td>
<td>17</td>
<td>116</td>
</tr>
<tr>
<td>8</td>
<td>Rh. Unchat, Sg. Kapit</td>
<td>14</td>
<td>84</td>
</tr>
<tr>
<td>9</td>
<td>Rh. Bundong, Sg. Kapit</td>
<td>51</td>
<td>306</td>
</tr>
<tr>
<td>10</td>
<td>Rh. Minggat, Sg. Kapit</td>
<td>27</td>
<td>186</td>
</tr>
<tr>
<td>11</td>
<td>Rh. Changgai, Sg. Kapit</td>
<td>22</td>
<td>186</td>
</tr>
<tr>
<td>12</td>
<td><strong>TOTAL</strong></td>
<td><strong>256</strong></td>
<td><strong>1688</strong></td>
</tr>
</tbody>
</table>

1.3 Location of Study Area.

The study area covers Rumah Ukan with 23 families with pop of 152, and Rumah Jandok with 20 families with pop of 253 along Bukit Guram Ulu Yong Road, kapit. (See Appendix A) The other chosen longhouse was Rumah Bundong with 41 families with pop 306 and was accessible through Bukit Guram Road. The Sketch Map of the area is shown in Appendix 1. Both Rumah Ukan and Rumah Jandok are accessible by Bukit Guram-Ulu Yong road. Rumah Bundung is accessible through Bukit Guram Road. From kapit town, it takes half hours to reach Rumah Ukan and one hour to reach Rumah Jandok through Ulu Yong road and another half hour to reach Rumah Bundung along Bukit Guram road.
1.4 Problem Statement

Dahlan (1989, pp 50) stress that "rural development is indeed a political exercise inspired by a political will and commitment and guided with high moral commitment in rural restructuring the fragmented economic space with the view of reducing inequalities in income and employment, and in access to public goods and services, and alleviating poverty". Therefore, one of the strategies to bring development to eradicate poverty in rural areas is the building of basic infrastructure. Road is one of the major basic infrastructure that will improve the mobility of rural community and the opening of new land for agriculture development. Road will bring economic benefits to the rural communities since their mode of transportation will be made faster, easier and cheaper compare to their traditional route of navigating through rivers. It is expected that roads will bring other form of infrastructure such as connecting villages with electricity, water supply and also the possibility of promoting and activating economic activities for cash economy to benefit and provide jobs for the communities to uplift their living standard.

Kapit Division is one of the most remote area and the less developed in Sarawak was one of the reason why the researcher's choose Kapit as the subject to assess the impact of the rural roads on the rural Iban communities. Generally this study was aimed to find out and assess the livelihood of Rumah Ukan, Rumah Jandok of Ulu Yong and Rumah Bundung of Ulu Kapit. These longhouses before the Ulu Yong